

Dear Committee Members,

I am honored to be sharing about my journey as a UConn student and the transformative impact that state funding has had on my education and future aspirations. As a low-income, first-generation college student from the Dominican Republic who self-identifies as black, white and hispanic, tuition and other expenses often feel overwhelming. However, participating in various programs and initiatives, such as the McNair program, the Biodiversity and Conservation Genomics training program, and a proposed SACNAS chapter, has made my college experience invaluable.

As a junior molecular and cell biology student, I applied to be a UConn McNair Scholar. Transitioning to UConn from Middlesex Community College, I had some research project experience, but I wanted to pursue an independent project. Plus, the McNair Program fully prepares first generation and low income students to be PhD students, and that is the next degree I want to achieve.

Last winter, I started on a plant genomics project that provided me excellent training to transition to a plant genome project that I fully focused on during the McNair Scholars research-intensive, graduate school preparatory, two-month summer component and I am continuing to advance on this academic year.

Without UConn funding, I would not have been able to make full-time progress on my project, visit graduate schools to learn more about PhD degrees and network with professors in new environments, reside on campus with the McNair Scholars to build community rich in culture and STEM research expertise, or present my poster at the end of the summer for the university to see the impact of my work on advancing genomics research. Now on the Biodiversity and Conservation Genomics research team, I have sequenced and assembled the

first reference genome for the butternut tree, a species of walnut native to the northeastern United States and Canada threatened by a devastating fungus. This project has not only given me a deep understanding of the field but has also opened up numerous opportunities for me to pursue further research. In January, I attended and presented my project in poster form at the international Plant and Animal Genome Conference with my research group, fully funded by the McNair Program. While in San Diego, California, I put my professional development training to work while connecting with faculty, discussing my project and ways to improve my upcoming research questions to prepare my work to be published in a peer-reviewed journal, and learned of outstanding PhD programs worldwide that have professors and projects of great interest to me that I never would have known existed.

What truly sets my UConn experience apart is the unwavering support and mentorship from faculty and staff members, such as Dr. Renee Trueman who oversees the McNair Program, and Dr. Eric Schultz and Dr. Jill Wegrzyn, my main faculty mentors in Ecology and Evolutionary Biology. Their guidance has been instrumental in my personal and academic growth, allows me to succeed at UConn academically while maintaining life balance, and provides me the tools to confidently pursue my dreams.

As a passionate synthetic biologist with a goal to make a difference in the world, I believe that this field holds immense potential to tackle society's biggest challenges. Synthetic biology involves redesigning biological systems to create new solutions in healthcare, agriculture, and the environment. The endless possibilities of taking nature's blueprint and modifying it to solve complex problems make synthetic biology a unique and exciting field focusing on creating a better future for all of us.

This is why programs like the McNair program and initiatives like the Biodiversity and Conservation Genomics program are crucial for the state of Connecticut. By investing in these programs at Uconn, the state invests in developing highly skilled and innovative professionals who will drive economic growth and create new industries. These programs provide students with hands-on learning experiences, exposure to cutting-edge technology, and opportunities to apply their critical thinking and problem-solving skills to real-world problems. This prepares the next generation of leaders, researchers, and innovators to be at the forefront of technological advancement and economic competitiveness.

The benefits of these programs go beyond just the students and the university. They also create partnerships between the university and local businesses and organizations, provide collaboration and economic development opportunities, and help promote the local community's growth and vibrancy. I can attest to the transformative power of these programs, as they have provided me with hands-on learning experiences, exposure to cutting-edge technology, and opportunities to develop my critical thinking and problem-solving skills. These experiences are necessary to be a competent researcher and be prepared to thrive in a Ph.D. program. I cannot stress the importance of state funding for programs like these enough.

My story is one of many examples that underscore the far-reaching effects that state funding can have on the education and future aspirations of students like myself. I am grateful for this opportunity to express my gratitude and share with you how well prepared I am for my future because of these programs.

Sincerely,

Cristopher Guzman